Bent, Sara

From: Meyer, Linda

Sent: Tuesday, October 07, 2014 3:40 PM

To: Bent, Sara

Subject: FW: FMC - phosphine monitoring Re: ambient air monitoring

Linda Meyer | RCRA Project Manager
U.S. Environmental Protection Agency | Region 10
1200 Sixth Ave, Suite 900 (AWT-121)
Seattle, WA 98103

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meyer.linda@epa.gov

From: Meyer, Linda

Sent: Monday, September 22, 2014 2:22 PM

To: Hedgpeth, Zach

Subject: Re: FMC - phosphine monitoring Re: ambient air monitoring

Thanks!

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From: Hedgpeth, Zach

Sent: Monday, September 22, 2014 11:32 AM

To: Meyer, Linda

Subject: RE: FMC - phosphine monitoring Re: ambient air monitoring

Hey Linda,

No idea whether it will bear fruit, but I'll put your question out to the national EPA Advanced Monitoring Team (of which I am a member) to see if anyone has any relevant input.

Thanks, Zach

Zach Hedgpeth, PE 206-553-1217

From: Meyer, Linda

Sent: Monday, September 22, 2014 10:10 AM

To: Kotchenruther, Robert; Hedgpeth, Zach; Valdez, Heather

Cc: Hall, Chris; Elleman, Robert; Hastings, Janis

Subject: FMC - phosphine monitoring Re: ambient air monitoring

Hi Bob - I am actually looking for either a new application (phosphine) for an existing technology or where the science is on detection of this type of constituent (including an explanation of the limitations of current instruments). The site I am working (FMC-Pocetallo) on has waste left in place with elemental phosphorus capped in place. It is generating phosphine. The Tribes have asked that we monitor the phosphine concentration. At one point when the elemental phosphorus ponds were operating with water over the solids we had a FTIR system. Now that the ponds are covered some monitoring is done with a Draeger PAC 7000 for low range, and X-AM 5000 for high range. This measurement is generally done monthly. The Tribes have asked for continuous monitoring of phosphine. Do you (or anyone one cc'd on this) know anyone in HQs air or ORD that might be able to help? Thanks for your assistance.

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From: Kotchenruther, Robert

Sent: Wednesday, July 23, 2014 7:35 AM

To: Hedgpeth, Zach; Meyer, Linda; Valdez, Heather

Cc: Hall, Chris; Elleman, Robert **Subject:** RE: ambient air monitoring

Hi Linda

Phosphine is not a typical pollutant we have experience monitoring for, but if your question is related to what monitoring equipment should be used then it will likely depend on what detection limits you're looking for. I found several methods on the web, one from OSHA (OSHA_1003.pdf) and one from CA Air Resources Board (air_rpt_phosphine.pdf), but to determine the right equipment for your project you should likely involve OEA's QA group (and maybe the lab) in the development of a QAPP.

If you already have the sampling instrumentation identified and your questions are more related to appropriate monitor placement for the project goals, then either Chris Hall (air monitoring QA specialist) or Rob Elleman (regional meteorologist) is the best person to engage.

Hope this is helpful.

Cheers Bob

Robert Kotchenruther, Ph.D. Environmental Scientist U.S. EPA Region-10 Office of Environmental Assessment 1200 Sixth Avenue, Suite 900, OEA-095 Seattle, WA 98101-3140 (206) 553-6218 Kotchenruther.Robert@epa.gov

From: Hedgpeth, Zach

Sent: Wednesday, July 23, 2014 5:54 AM

To: Meyer, Linda; Valdez, Heather

Cc: Hall, Chris; Elleman, Robert; Kotchenruther, Robert

Subject: RE: ambient air monitoring

Hi Linda,

If I had questions about ambient air monitoring, I'd track down one of the great OEA technical air staff cc'd on this message. :)

Not sure which of the guys would best be able to help, so I'm cc'ing them all...

Zach Hedgpeth, PE Air Pollution Control Technology & Emission Testing Office of Environmental Assessment EPA Region 10 - Seattle

hedgpeth.zach@epa.gov

206-553-1217

From: Meyer, Linda

Sent: Tuesday, July 22, 2014 5:04 PM **To:** Valdez, Heather; Hedgpeth, Zach **Subject:** ambient air monitoring

Heather/Zach – do you know or do you know who I can talk to about ambient air monitoring for phosphine?

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